Annual Report

2019

The Student-Managed Endowment for Educational Development (SEED)

<u>Compiled By:</u> Nathaniel Post, Co-CEO Gretchen Halloran, Co-CEO Ben Baumann, CIO Michael White, CAO Virginia Tech Pamplin College of Business

www.virginiatechseed.com



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Notable Placements

Full-Time:

Ben Baumann BAML, IBD

Danielle Link BAML, ECM

JP Gallagher Blackstone, Portfolio Management

Logan Stone BAML, IBD

Kent Bommer Exxon Mobil, Engineering

Bradley Ong Rothschild & Co, IBD

Michael Durrwachter DC Advisory, IBD

Elizabeth Barron BAML, DCM

John Harsh RSM, Audit

Sean Bruestle KPMG, Securitization

Justin Daves BAML, ECM

Sammy Daoudi Capital One, Business Analyst

Maddie Mellenkamp BP, Supply and Trading

Wes Hammershmidt Deloitte, Consulting

SEED 2019 Operating Highlights

Financial Highlights

In 2019, the Student-Managed Endowment for Educational Development (SEED) delivered a total return of 31.57%. The S&P 500 Index, our benchmark, returned 31.49% over the same year, giving us an active return of 0.08% for 2019. Thus, SEED roughly performed in like with the market in gross terms. We concluded 2019 with \$5,748,474 in Assets Under Management, returning \$1,353729 to the Virginia Tech Endowment over the year. SEED's risk adjusted return using Jensen's Alpha was 0.67% based on our portfolio beta of 0.98. With a 31.57% absolute return, a risk-free rate of 1.95% based on the 10-year U.S. Treasury rate as of December 31, 2019, and a weighted portfolio beta of 0.98, we concluded 2019 with a Treynor ratio of 30.22. This outperformed the market on a risk adjusted basis as the S&P 500 Treynor ratio was 29.53. Exhibit 1 shows SEED's absolute performance of 31.57% compared to the total return of the S&P 500 of 31.49%. Exhibit 2 lays out the performance of SEED's portfolio against the S&P 500 at these rates and shows both absolute and risk adjusted alpha generated in 2019.

2019 Total Return Relative to the S&P 500

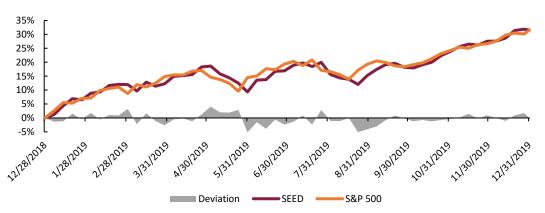


Exhibit 1

Exhibit 2 lays out the performance of SEED's portfolio against the S&P 500 and shows both absolute and risk adjusted alpha generated in 2019.

	Absolute Performance	Risk Adjusted Performance	SEED's Absolute Alpha	SEED's Risk Adjusted Alpha
SEED	31.57%	32.16%	-	-
S&P 500 Total Return	-	31.49%	0.08%	0.67%

Pg. 02

Notable Placements

Internships:

Nathaniel Post BAML, ECM

Gretchen Halloran BAML, DCM

Michael White Walmart, Engineering

Nick Reisenweaver BAML, Rates & Currencies

Thomas Rios J.P. Morgan, S&T

Faycal El Jai BAML, IBD

Raya Mufti Credit Suisse, S&T

James Compton KPMG, Deal Advisory

Nate Fender Capital One, FRP

Quinn O'Neill KPMG, Risk Advisory

Hayden Kickbush KPMG, Deal Advisory

Jake Cullen Intelectual Capital, Asset Management

Chase Babus AllianceBernstein, Equity Research

Jake Moore JLL, Capital Markets For analyst coverage purposes, SEED condenses the eleven sectors of the S&P 500 into six. Real Estate is included in SEED's Financials Sector, Materials and Utilities are included in the Industrials Sector, Consumer Staples and Consumer Discretionary make up the Consumer Sector, and Information Technology and Communication Services make up the Technology Sector. Exhibit 3 outlines our sector allocations broken down according to the eleven sectors that make up the S&P 500 and our respective relative weightings to each as of the end of 2019. "Unclassified" represents our cash holdings and money allocated towards market ETF's.

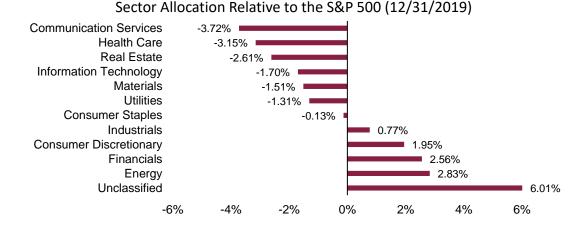
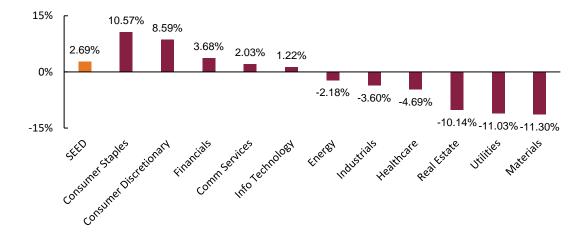


Exhibit 3

In 2020, we plan to rebalance our sector weightings and the weights of our holdings within each sector to reduce our reliance on some of our largest positions. This is in part to reduce the risk of being overexposed to one or few positions relative to the rest of the portfolio, and to spread capital to some of our smaller positions where we see significant upside. SEED aims to find value in individual equities through the disparity of intrinsic and market value. However, we feel allocating more capital to stocks and sectors that we believe to be most undervalued and are likely to deliver the greatest return will aid in our mission to outperform the S&P 500. Capital allocation is widely regarded as a more defensive strategy, though, through the proper selection of stocks and sectors that we believe to be most undervalued and are likely to deliver the greatest return, will aid in our mission to outperform the S&P 500. Sector allocation effects contributed (.013%) to SEED's overall return in 2019, selection contributed .095%, and interaction effect contributed (.002%). Due to smaller allocations towards Real Estate, Utilities, and Materials relative to the S&P 500, the underperformance of our holdings in these sectors had less adverse impact on SEED's overall portfolio performance. Exhibit 4 outlines our individual sector performances broken down according to the eleven sectors that make up the S&P 500.



Sector Performance Relative to the S&P 500 Net of Dividends

Exhibit 4

Operating Highlights

SEED finished 2019 with 35 members and 13 analysts in training. Our previous Co-CEO's, Grant Briers and Danielle Link, CIO, Logan Stone, and CAO, JP Gallagher, all concluded their tenures on SEED's executive team in December of 2019. We thank them for their hard work and dedication and wish them all the best as they join the workforce in the coming year.

Five of SEED's members graduated in December 2019. Danielle Link, one of our previous Co-CEO's, and Logan Stone, our previous CIO, will be joining Bank of America full-time in the summer of 2020. JP Gallagher, our previous CAO, has already begun working at Blackstone. Bradley Ong, our previous Healthcare Lead Analyst, will be joining Rothschild & Co full-time. Sean Bruestle, an analyst in the Healthcare sector, is going to work at KPMG full-time.

Looking Ahead

SEED's newly appointed Co-CEO's, Nathaniel Post (Junior, Finance) and Gretchen Halloran (Junior, Finance), are excited for the year ahead and look forward to a successful and productive 2020. Our new CIO, Ben Baumann (Senior, Finance), and CAO, Michael White (Junior, Industrial Systems Engineering), both look forward to bringing further value to SEED through their respective positions on our Executive Team. In 2019 we began developing quantitative value and quantitative momentum strategies, which we plan to implement by the end of March 2020. This project is being overseen by our new CAO. Nick Reisenweaver and Faycal El Jai is stepping in as the new Lead Analysts of the Consumer and Technology Sectors respectively.

As of the end of 2019 and the writing of this Annual Report, we believe the average fundamental characteristics of SEED's portfolio compares favorably with those of our

benchmark. Exhibit 5 highlights a few key valuation metrics comparing SEED's portfolio to the S&P 500. Investors have been concerned of late with the S&P 500 reaching all time high's in terms of valuation and market growth rates not seen since the early 2000's.

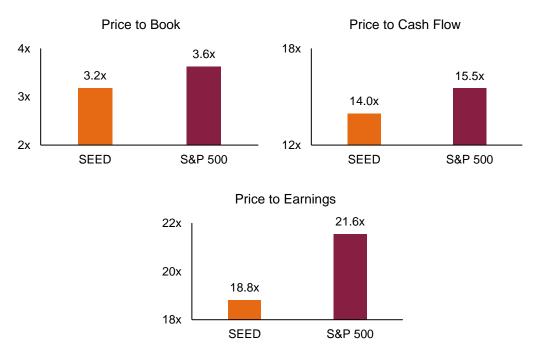


Exhibit 5

SEED is grateful to our dedicated alumni, whose continuous support provides members with invaluable mentorship and opportunities. During 2018, SEED established its first Advisory Board. We are extremely grateful for their willingness to serve on the Board. The members of the SEED Advisory Board are listed below.

SEED Advisory Board

Trey Snow, The London Company, Director of Research, Chair of Advisory Board
Kevin Bennett, Research Analyst, First Vice President – Investments, Davenport & Company
Tracy Castle-Newman, COO, Global Institutional Equity Distribution, Managing Director, Morgan Stanley
Duffy Fischer, Equity Analyst, Director, US Chemicals, Barclays Capital
Chad Meade, Partner and Portfolio Manager, ArrowMark Partners
Patrick Moody, Associate, S3 Ventures
James Rosenstock, Executive Vice President, International, WWE
Christina Todd, Vice President & Financial Advisor, Cary Street Partners
Daniel Ward, CIO, Virginia Tech Foundation

Strategic Initiative

SEED is currently in the process of implementing the first-ever, factor-based quantitative investing strategies in our portfolio. These strategies are going to be implemented using the Python programming language on the Quantopian platform. Quantopian is a free website that provides historical data, dating back to the year 2000- and tools for applying the quantitative approach to investing. It also has a built-in back-testing algorithm we are using to evaluate different approaches. The result produced by the Quantopian platform will be further analyzed and corroborated using the Equities Lab software as well as the Bloomberg back testing software.

Factor-based investing selects securities that exhibit traits commonly associated with outperformance. The two strategies that SEED has decided to pursue is quantitative value and quantitative momentum. Quantitative momentum forms a portfolio of equities that have appreciated highly over an intermediate time period, which is the most recent 11 out of the last 12 months. The rationale for the strategy is that investors frequently underreact to good news. Relying on the work of Gray and Vogel (*Quantitative Momentum*, 2016), this strategy is implemented using five steps: (1) identify universe of investible stocks, (2) core momentum screen, (3) momentum quality screen, (4) seasonality screen, and (5) invest with conviction.

The quantitative strategy seeks to generate attractive risk-adjusted returns by identifying undervalued equities based on the extensive analysis of fundamental data. Research finds that a systematic and consistently applied approach to investing outperforms human "experts". This approach is also implemented using five steps: (1) identify investible universe, (2) remove outliers, (3) screen for value, (4) screen for quality, (5) invest with conviction. SEED hopes to implement this portfolio between February and March of 2020. More information about SEED's new Strategic Initiative can be found in our report on the strategic initiative to date.

Year in Review

Recruitment

SEED member recruitment continues to take place during both the fall and spring semesters. Due to the high volume of applicants and success we saw in adding a third round of interviews to the application process, we decided to continue this recruitment model. Each applicant submits their resume and transcript, as well as a questionnaire. During the second round, applicants are given over a week to prepare a 30-minute stock pitch presentation. A select group is then chosen to participate in a 30-minute behavioral interview. This allows us to observe more pitches and fill the training class with high-quality candidates. In the fall of 2019, we received 68 applications and accepted 13 students into our Analyst in Training (AIT) program. The 13 students, averaging a 3.74 GPA, consist of 11 finance students, 1 computer science student, and 1 industrial & systems engineering student.

Training

Once applicants are extended an offer, they must complete a semester of rigorous training, as this is essential to the advancement and growth of SEED. In 2019, we successfully implemented our sector rotation program. This allows AITs to gain an in-depth understanding of each of our six sectors, while also learning about SEED's overall investment process. In addition to the group pitch and capstone projects that have traditionally served as progress benchmarks in making the decision for extending full membership, we are including another group project that will be completed at the conclusion of our quantitative valuation training module. Our AIT training program has always focused on the use of discounted cash flow (DCF) and relative valuation (price multiple) models. We are now extending that emphasis by adding a required group project that applies these methods. This will provide additional practice and a deeper understanding of quantitative valuation prior to the completion of capstone projects and extension of full membership to AITs.

Trips

In April of 2019, SEED travelled to New York City for its annual networking trip. The group met with Virginia Tech alumni at eight firms: AllianceBernstein Bank of America Merrill Lynch, Citigroup, Credit Suisse, Goldman Sachs, J.P. Morgan, KPMG, and Morgan Stanley. Members of SEED attended Hokies on Wall Street, where they networked with Virginia Tech Alumni and gained insights from speakers at the event. Due to the success of the trip, a few SEED members obtained internship positions for the summer of 2020. In the past, the group participated and found success in various stock pitch competitions. Though we did not attend any in 2019, we are looking to participate in more in 2020.

Investment Strategy and Process

SEED took advantage of the great year for equities in general and outperformed our benchmark on an absolute and risk-adjusted basis. However, SEED held some underperforming companies too long. Fluor (-33.42%) and Concho (-29.3%) are positions that we should have exited earlier. In the future, SEED will be more diligent in paying attention to worst-case-scenario risks like we saw in 2019.

SEED's primary objective is to outperform our benchmark, the S&P 500, by finding undervalued stocks and exploiting the disparities between market and intrinsic values. Our approach to finding new investment opportunities combines both a qualitative research and quantitative valuation analysis. Identification of companies for potential subsequent valuation is done using equity screening tools paired with thorough sector and industry analysis. After an individual company has been selected, we begin the process of qualitative and quantitative analysis and valuation.

The quantitative research aspect of our investment strategy is crucial to carrying out our quantitative analyses and arriving at reliable estimated intrinsic value ranges. Fully understanding a company's narrative helps explain the apparent disparity between market and intrinsic values and challenges our understanding and confidence that the two values will converge. This qualitative analysis involves understanding the selected company's business model and industry in granular detail.

Our quantitative analysis forecasts the future cash flows of the selected company over its life cycle. The primary approaches used to make these forecasts and arrive at an implied intrinsic value are the DCF and relative valuation models. For some equities, we apply a Net-Asset-Value (NAV) model or a Residual-Income-Model (RIM) to arrive at our estimated intrinsic value. In applying our models, we run a sensitivity analysis showing Bear, Base, and Bull case scenarios and how intrinsic value is affected under each circumstance.

The relative valuation analysis helps us correctly place the selected company among its competing peers. This allows us to view the selected company within its competitive sphere and identify further characteristics that signify its potential for being undervalued. Once analysis indicates that a company's stock in undervalued, it is presented to the full SEED group. At the conclusion of the pitch, each member of our executive team and the six lead analysts vote on whether we should invest in the presented company. At the conclusion of 2019, SEED had 49 holdings in our portfolio.

2020 Investment Outlook

In recent years, equity markets have moved away from fundamental value investing towards growth stocks with little apparent regard for standard valuation. With six of the seven largest holdings in the S&P 500 being technology-based companies (Microsoft, Apple, Amazon, Alphabet, Facebook, and Visa), value investors have largely lagged growth funds in performance. With that being said, SEED looks to find a balanced mix with a focus on fundamentally undervalued companies combined with the introduction of our Momentum Portfolio. As the practice of algorithmic trading becomes more prominent in the equity markets, prices continue to appreciate based on trading volumes and momentum, rather than companies creating new value for shareholders. As seen in Exhibit 6, S&P 500 valuations continue to outpace overall earnings growth. SEED seeks to hold a more diverse range of market cap firms and to strike a balance between value and growth stocks. We believe this will help further diversify SEED's risk exposure and allow for the capitalization on opportunities and returns present in growth stocks.

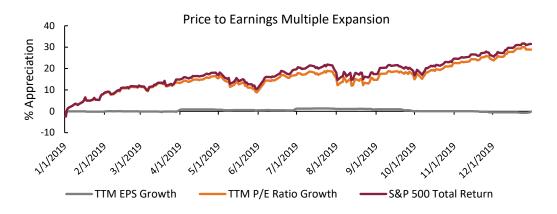


Exhibit 6

As pointed out above in the Financial Highlights section, SEED is beginning 2020 by incorporating a "defense as an offense" approach to our asset allocations in addition to our current investment strategy of individual stock selection. Allocation effects have negatively affected our overall returns over the past few reporting years. However, through more thorough analysis, we believe better performance may be achieved by actively overweighting the specific sectors and holdings we see to have the greatest return potential, and underweighting those that do not.

While we don't see a large economic recession occurring in the next 12 months, the equity markets are poised for a mild correction due to global trade tensions, inflated valuations, and an aging economic cycle. Despite this, we still see favorable risk and reward profiles in equities relative to compressed spreads in corporate debt instruments and Treasuries yielding low returns. Over the previous year, we saw numerous companies reaching 52-week highs and record valuations, with little to show in terms of fundamental backing.

This has led us to begin considering the possibility of a correction in the coming year, similar in characteristics to the one we experienced at the end of 2018. Though we are preparing for this possibility, we still see plenty of upside potential in various areas of the market and are continuing to find and exploit those opportunities.

Sector Highlights

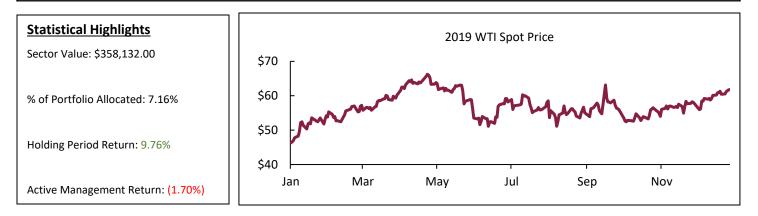
Below are sector highlights that expand on trends that influenced each sector over the past 12 months and how SEED performed in response. One goal entering 2019 for our team was to capitalize on gains we had seen throughout this bull market by selling securities for which we didn't see additional upside . This, in turn, allows us to lock in positive returns from securities in our portfolio that have reached fair value and to build human capital through an increased number of pitches. In 2019, SEED recognized 24 completed and approved buy or sell pitches. A company bought or sold in 2019 is denoted by " ** " next to its name, listed in the tables included in the sections below. For positions exited in 2019, the listed return represents the January 1, 2019 through sell date return and are shown with an end of year weight of 0%. For positions entered in 2019, the listed return represents the purchase date through December 31, 2019 return.

ENERGY SECTOR

JUSTIN DAVES, LEAD ANALYST ANALYSTS: JAKE MOORE, MADDIE MELLENKAMP, NOAH GOEBEL, HAYDEN KICKBUSH

Sector Overview

During the year, oil prices experienced their largest annual gain since 2016 with Brent and WTI both rising over 30%. Oil saw its largest single day increase since 2008 as a result of the mid-September Aramco attacks in Saudi Arabia. Throughout the year, however, U.S. petroleum production continued to put downward pressure on oil prices. OPEC+ extended their production cuts in late June, as well as announcing their most significant cuts to date in early



Holdings	2019 Return	End of Year Weight
GeoPark Ltd**	43.84%	18.18%
Magellan Midstream	15.56%	17.94%
Marathon Petroleum	6.28%	25.31%
Halliburton**	11.52%	15.02%
Suncor Energy	21.84%	17.25%
Concho Resources**	(29.30%)	0%
GasLog Ltd**	(33.61%)	6.30%

Portfolio Update

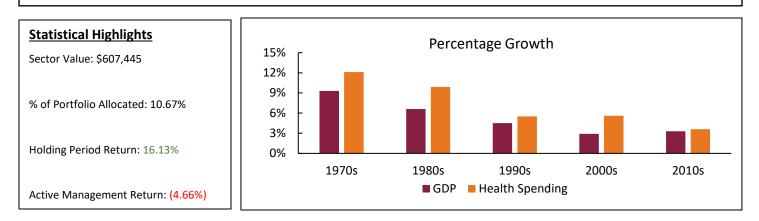
SEED currently holds six companies as a part of the energy sector within the group. The main goal for the energy sector was to generate more turnover within the group. We had previous holdings that we did not see value in and had previously not seen much turnover. In 2019, we added Halliburton (HAL) and GasLog (GLOG) to our portfolio while exiting out of our Concho Resources (CXO) position. Our GasLog (GLOG) position has been our worst performing holding since we purchased them on 11/04/2019. They missed earnings on 11/06/2019 due to a recorded loss in regards to hedging instruments tied to LIBOR rates. We are monitoring this closely for their next earnings. Further underperformance can be attributed to Liquified Natural Gas (LNG) prices being at multi year lows, and general market concerns over Coronavirus and its influence on LNG demand, especially in China. We decided to exit our Concho Resources (CXO) after they had missed earning on 07/31/2019. We had monitored them closely and further analysis we decided that CXO was synthetically delivering shareholder value while ignoring other key aspects of their business such as debt payments. Going forward the sector is looking into new companies in the royalty space and also at large integrated companies as a potential hedge against our LNG position and a downturn in economic conditions.

HEALTHCARE SECTOR

KENT BOMMER, LEAD ANALYST ANALYSTS: GRANT BRIERS, TANNER DOVERSPIKE, NATE FENDER, CONNOR JOHNSON, BOB STOUT

Sector Overview

Healthcare underperformed the overall market by 9.16%. There were several large governmental and political influences, including the Opioid Crisis, the Trump administration investigating PBMs, Pharmaceutical executive Congressional hearings on drug prices, and speculation from 2020 Democratic Presidential candidates' policies.



Holdings	2019 Return	End of Year Weight
Abbvie	1.50%	17.13%
Biogen**	(23.99%)	0%
Cooper Pharmaceuticals**	4.83%	19.88%
Jazz Pharmaceuticals**	9.52%	8.26%
Lab Corp	33.88%	22.01%
McKesson	24.07%	0%
United Health	19.99%	24.83%

Portfolio Update

We sold Biogen (BIIB) in mid-April due to concerns over insufficient pipeline development.

We entered into Jazz Pharmaceuticals (JAZZ) in mid-May. They produce sleep/neuroscience and hematology/oncology drugs. Xyrem is its largest drug which treats symptoms of narcolepsy.

We exited our position in McKesson (MCK) in early October due to increased concern from opioid litigation. While we view the culpability of drug distributors to be medium-low within the whole value chain, we believe there is a disconnect between the culpability of other industries in the value chain and their ability to pay litigation fees. Therefore, McKesson may end up paying more than their fair share. Additionally, there are multiple litigating parties, creating a race to the bottom for settlements and litigation dragging on for years.

We entered into Cooper Companies (COO) in late November. They offer specialty contact lenses and women's health services, a defensive product portfolio. MiSight and Paragard offer strong growth opportunities as unique products on the market.

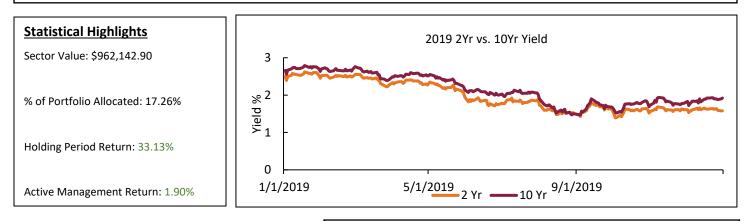
We continued to hold LabCorp (LH), United Health (UNH), and AbbVie (ABBV) for their strong business model, overreaction to political uncertainty, and developing pipeline, respectively.

FINANCIALS SECTOR

DANIEL MALLOY, LEAD ANALYST ANALYSTS: THOMAS RIOS, MITCHELL BRAZIER, QUINN O'NEILL, SHLOAK PATIL

Sector Overview

Throughout 2019, our sector closely monitored Fed movements and changes to interest rates. Currently, the Fed plans to keep rates at their current level of 1.50%-1.75%. To ensure our holdings are well positioned in 2020, we will need to monitor any compressed NIMs, as cuts in the near term aren't likely.



Holdings	2019 Return	End of Year Weight
Assured Guaranty	28.90%	21.22%
Discover Financial	46.24%	11.49%
Wells Fargo	22.29%	12.71%
PNC Financial	40.35%	20.21%
Everest RE	28.89%	8.28%
Four Corners Property Trust	10.44%	1.54%
First Republic Bank**	24.32%	13.80%
XLRE	6.32%	10.74%

Portfolio Update

In 2019, the financial sector returned 33.13%, while we had an active management return of 1.90%. Although Well Fargo (WFC) generated a positive 2019 return of 14.61%, they lagged for most of the year due to unrelenting litigation claims, uncertainty of senior management, and missed earnings. They represent an end of year weight of approximately 12.71%. However, 2019 was highlighted by returns of Discover Financial (DFS) and PNC Financial (PNC), respectively, which represent a combined 31.7% of the financials portfolio. This is likely due to an overall rotation from momentum to value stocks and banks' ability to secure cheaper sources of funding. However, we don't see this outperformance continuing in 2020 as we expect the pace of buybacks to slow, modest loan growth, and the continued political uncertainty with the 2020 election.

Moving forward to 2020, we are rebalancing the portfolio within the Financials sector as we are starting the year overweight banks. We will look to full sell WFC and trim our position in PNC Financial and Assured Guaranty to take advantage of our profits. With this rebalance, our sector will be equal weight with the S&P 500. We are also looking to move out of our position in the XLRE and establish a more significant presence in the REIT space in order to outperform the Real Estate index. Currently, we find Simon Property Group (SPG) attractive, as it is one of the few REITs that has the supporting financials to justify significant upward movement.

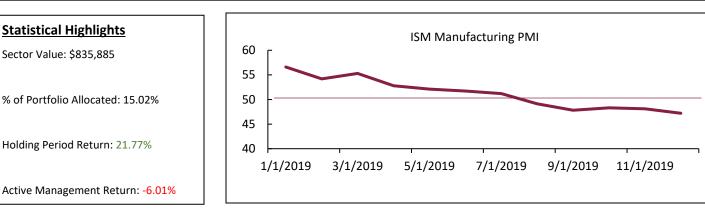
INDUSTRIALS SECTOR

ELIZABETH BARRON, LEAD ANALYST

ANALYSTS: JAMES COMPTON, SAMMY DAOUDI, WES HAMMERSCHMIDT, ERIC FORDERKONZ, PARKER EYERMAN, JAKE CULLEN

Sector Overview

Slowing global growth and the ripple effects from trade war uncertainty are top drivers for the decline in U.S. Industrial demand in 2019. Manufacturing activity has registered as contracting at 47.2 and continues to put downward pressure on the industrials and the materials sector. The United States-Mexico-Canada and China trade agreements serve as the main determining factors for Industrial demand moving into 2020.



Portfolio Update

The ISM Manufacturing Index is continuing to contract at a faster rate. This is the fifth consecutive month of contraction, not boding well for general Industrial's macroeconomic environment.

Our top two performers in 2019 was Honeywell International (36.19%) and Union Pacific Corporation (34.96%). Our worst performer that we still hold is Nucor Corporation (-0.68%). Nucor Corporation is the largest steel producer in the United States and has been heavily impacted by the trade war with China which created significant headwinds for the steel industry.

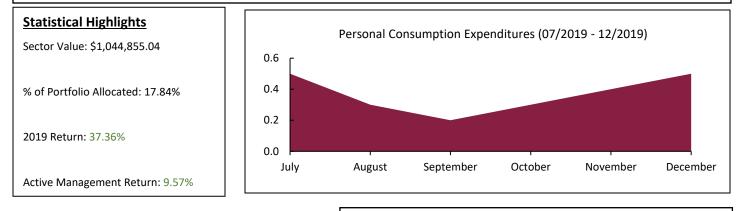
In November we entered into a position with Roper Technologies, a high-tech industrial conglomerate. Roper pursues an asset light business model, focused on software and engineered products and services. This position will provide increased diversification to the portfolio through 45 individual businesses operating in niche markets. Moving into 2020 we are looking to add another materials company specifically in a specialty chemical, or container and packaging company. In the specialty chemicals industry, the ongoing consolidation of the industry through M&A activity is expected to lead to higher margins and in the container and packaging industry a demand rebound as well as deleveraging will help hedge against an economic downturn.

2019 Return	End of Year Weight
21.51%	19.32%
10.27%	15.46%
31.56%	19.89%
(33.42%)	0%
36.72%	21.10%
19.05%	0%
11.87%	7.24%
1.62%	13.34%
33.67%	3.64%
	21.51% 10.27% 31.56% (33.42%) 36.72% 19.05% 11.87% 1.62%

CONSUMERS SECTOR NICK REISENWEAVER, LEAD ANALYST ANALYSTS: RAYA MUFTI, ALEX ROWE, MICHAEL DURRWACHTER

Sector Overview

The Consumer Sector remained largely driven by the ongoing trade dispute with China, geopolitical uncertainty, and recessionary speculation. In 2019, we saw three 25 basis point rate cuts in a mid-cycle adjustment by the Federal Reserve as global growth slowed and trade war sentiment worsened. However, the sentiment turned bullish towards the end of the year as the U.S. and China signed a phase-one trade deal adding to market gains and contributing to the consumer sectors outperformance.



Holdings	2019 Return	End of Year
Starbucks**	7.87%	<i>Weight</i> 15.54%
Alibaba**	16.64%	18.61%
Capri**	(5.73%)	5.36%
Dollar General	44.82%	17.02%
Garrett Motions	(21.03%)	0.12%
Hanes Brands	17.21%	4.29%
Hilton Grand Vacations	30.67%	1.15%
Altria**	7.24%	9.03%
Conagra**	17.86%	13.86%
Constellation Brands**	1.23%	15.09%
Hilton**	32.11%	0%
Home Depot**	20.12%	0%
Estee Lauder**	32.44%	0%
Toll Brothers**	19.76%	0%

Portfolio Update

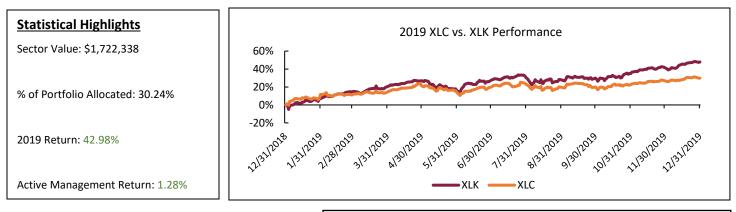
The Consumers Sector outperformed our benchmarks XLY and XLP by 9.57%. Our sector's outperformance was largely driven by our two largest holdings: Dollar General and Alibaba. Dollar General returned 45% in 2019 and ended the year at 17.02% of our portfolio. Because of this, we will be looking shave our position by roughly \$70,000 as we take gains and devote capital elsewhere. We also enjoyed favorable returns from two endof-year pitches of Starbucks and Conagra Brands. Conagra Brands reported favorable Q2 2020 results on December 19th causing the stock price to jump nearly 18% in intraday trading. In the near term, our sector will be looking to further trim positions in Starbucks and Alibaba and looking to cut our losses in underperforming stocks. We plan to decrease our exposure to China between Capri Holdings, Hanesbrands, and Garret Motions. Going forward, we hope to add two more positions to the portfolio in the first half of 2020. We will continue to diversify our portfolio and enter smaller positions to help hedge against risk and limit exposure to areas of the sector we feel are currently overvalued. Despite believing the staples sector has been overbought, we will continue to monitor and look for undervalued companies with favorable valuation. Additionally, we have found past success as well as future potential in discretionary companies with staple characteristics that we believe can maintain upside in the event of a recession.

TECHNOLOGY SECTOR

FAYCAL EL JAI, LEAD ANALYST ANALYSTS: CHASE BABUS, JOHN HARSH, TANAY BHEDA, WILLIAM VU

Sector Overview

Over the last year, the Technology Sector made one buy, one sell, and one partial sell. In the semiconductor industry, we exited our position in Lam Research on 10/28/19 and added a new position, Skyworks, on 11/15/19. Also, we partially exited Apple mid-November since it grew to 20.07% of the tech sector's portfolio. We trimmed \$70k reducing our exposure to 16.96% which then increased to 18.90% (EOY) due to the company's strong performance.



Holdings	2019 Return	End of Year Weight
Adobe	50.68%	11.47%
Apple	87.18%	18.90%
Cognizant	(3.67%)	5.88%
Facebook	51.26%	11.05%
Oracle	15.09%	10.70%
Qualcomm	53.75%	6.09%
Salesforce	20.45%	8.18%
Skyworks**	19.34%	6.85%
Take-Two	20.17%	9.99%
Lam Research**	106.55%	0%
XLC	25.66%	10.88%

Portfolio Update

The Infotech (XLK) and Communications (XLC) Sectors generated 49.76% and 29.32% respectively. In comparison, SEED's XLK and XLC holdings generated 38.77% and 33.63% respectively. Our top performers this year were Lam Research (106.55%), Apple (87.18%), Qualcomm (53.75%), Facebook (51.26%), and Adobe (50.28%). Apple's performance was driven by the growth in its wearables and services segments. The settlement in the Apple/Qualcomm lawsuit and the rebound of the semiconductor industry propelled Qualcomm 53.75% in 2019. This year, Facebook rebounded from its drop in late 2018 caused by the Cambridge Analytica scandal. Adobe's innovations provided a competitive edge to continuously beat on top and bottom line, most notably their new AI-based software called Adobe Sensei. On the other hand, Cognizant was our worst performing holding with a 2019 return of -3.67%. In addition to a bleak management outlook for the year, Cognizant's poor performance is due to pricing pressure on legacy IT work which caused continuous worse than expected top and bottom-line results. Brian Humphries, Cognizant's new CEO since April of last year, has started to make operational changes with the goal to see concreate results over the next few quarters. SEED's Technology Sector will continue to closely follow Cognizant's performance and reevaluate our investment thesis in conjunction with their valuation. If Cognizant's new management fails to turn the situation around, we will inevitably exit this position.

2019 SEED Team



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